

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in this application.

1-5. (cancelled).

6. (previously presented) A surgical drill guide assembly comprising:

an outer stem having a bore and a longitudinal axis;

at least one drill guiding barrel having a passageway, the passageway having a predetermined trajectory, the predetermined trajectory being at a substantially fixed angle with respect to the outer stem, the at least one drill guiding barrel being pivotably attached to the outer stem and configured to receive and guide a surgical drill bit, wherein the at least one drill guiding barrel is pivotably attached to the outer stem such that the fixed angle of the drill guiding barrel remains constant throughout movement of the drill guiding barrel about the outer stem;

a rod at least partially disposed in the bore and releasably attached to both the outer stem and a bone plate; and

a release mechanism for securing the outer stem to the rod.

7. (previously presented) The surgical drill guide assembly of claim 6, further comprising a handle member offset from the stem by an offset handle arm.

8. (previously presented) A surgical drill guide assembly comprising:

an outer stem having a bore and a longitudinal axis;

at least one drill guiding barrel having a passageway, the passageway having a predetermined trajectory, the predetermined trajectory being at a substantially fixed angle with respect to the outer stem, the at least one drill guiding barrel being attached to the outer stem and configured to receive and guide a surgical drill bit, wherein the at least one drill guiding barrel is movably attached to the outer stem such that the fixed angle of the drill guiding barrel remains constant throughout movement of the drill guiding barrel about the outer stem;

a rod at least partially disposed in the bore and releasably attached to both the outer stem and a bone plate;

a release mechanism for securing the outer stem to the rod; and

a handle member offset from the outer stem by an offset handle arm, wherein the handle member pivots in relation to the offset handle arm.

9. (previously presented) A surgical drill guide assembly comprising:

an outer stem having a bore and a longitudinal axis;

at least one drill guiding barrel having a passageway, the passageway having a predetermined trajectory, the predetermined trajectory being at a substantially fixed angle with respect to the outer stem, the at least one drill guiding barrel being attached to the outer stem and configured to receive and guide a surgical drill bit, wherein the at least one drill guiding barrel is movably attached to the outer stem such that the fixed angle of the drill guiding barrel remains constant throughout movement of the drill guiding barrel about the outer stem;

a rod at least partially disposed in the bore and releasably attached to both the outer stem and a bone plate;

a release mechanism for securing the outer stem to the rod, wherein the release mechanism has a non-circular passage at one end.

10. (previously presented) The surgical drill guide assembly of claim 9, wherein the rod has a non-circular cross-section at one end.

11. (previously presented) The surgical drill guide assembly of claim 6, wherein the rod is threaded at one end.

12. (previously presented) A surgical drill guide assembly comprising:

an outer stem having a bore and a longitudinal axis;

at least one drill guiding barrel having a passageway, the passageway having a predetermined trajectory, the predetermined trajectory being at a substantially fixed angle with respect to the outer stem, the at least one drill guiding barrel being attached to the outer stem and configured to receive and guide a surgical drill bit, wherein the at least one drill guiding barrel is movably attached to the outer stem such that the fixed angle of the drill guiding barrel remains constant throughout movement of the drill guiding barrel about the outer stem;

a rod at least partially disposed in the bore and releasably attached to both the outer stem and a bone plate; and

a release mechanism for securing the outer stem to the rod;

wherein the outer stem includes one or more ball detents located therein and a groove located on the rod, wherein the one or more ball detents and groove are used to releasably attach the stem to the rod.

13. (previously presented) A surgical drill guide assembly comprising:

an outer stem having a bore and a longitudinal axis;

at least one drill guiding barrel having a passageway, the passageway having a predetermined trajectory, the predetermined trajectory being at a substantially fixed angle with respect to the outer stem, the at least one drill guiding barrel being attached to the outer stem and configured to receive and guide a surgical drill bit, wherein the at least one drill guiding barrel is movably attached to the outer stem such that the fixed angle of the drill guiding barrel remains constant throughout movement of the drill guiding barrel about the outer stem;

a rod at least partially disposed in the bore and releasably attached to both the outer stem and a bone plate; and

a release mechanism for securing the outer stem to the rod, wherein the drill guide barrel pivots about a hinge on the stem.

14. (cancelled).

15. (withdrawn) The surgical drill guide assembly of claim 6, wherein the drill guide barrel has a plurality of drill insertion locations.

16. (withdrawn) A surgical drill guide assembly comprising:

an outer stem having a bore and a longitudinal axis;

at least one drill guiding barrel having a passageway, the passageway having a predetermined trajectory, the predetermined trajectory being at a substantially fixed angle with respect to the outer stem, the at least one drill guiding barrel being attached to the outer stem and configured to receive and guide a surgical drill bit, wherein the at least one drill guiding barrel is movably attached to the outer stem such that the fixed angle of the drill guiding barrel remains constant throughout movement of the drill guiding barrel about the outer stem;

a rod at least partially disposed in the bore and releasably attached to both the outer stem and a bone plate; and

a release mechanism for securing the outer stem to the rod;

wherein the drill guide barrel has multiple insertion passageways at different angular orientations.

17. (withdrawn) The surgical guide assembly of claim 16, wherein the insertion passageways have angular orientations of about 0° to about 10° toward the longitudinal axis of a bone plate and about 75° to about 90° upward or downward to the longitudinal axis of a bone plate.

18. (previously presented) The surgical drill guide assembly of claim 6, wherein the drill guide barrel has a depth stop for preventing a drill bit from exceeding a pre-determined depth.

19. (cancelled).

20. (previously presented) A surgical drill guide assembly comprising:

an outer stem having a bore and a longitudinal axis;

at least one drill guiding barrel attached to the outer stem and configured to receive and guide a surgical drill bit, wherein the at least one drill guiding barrel is movably attached to the outer stem and wherein the at least one drill guiding barrel is at a substantially fixed angle with respect to the outer stem;

a rod at least partially disposed in the bore and releasably attached to both the outer stem and a bone plate;

a release mechanism for securing the outer stem to the rod;

a handle member offset from the stem by an offset handle arm, said handle member pivoting in relation to the offset handle arm; and

a button cam, wherein the handle member and offset handle arm are releasably locked in angular position by detents on said button cam being moved into or out of engagement with detent grooves in the handle member.

21-24. (cancelled).

25. (previously presented) A surgical drill guide assembly comprising:

an outer stem having a first longitudinal axis;

a drill guiding barrel configured to receive and guide a surgical drill bit, the drill guiding barrel being pivotably attached to the outer stem, the drill guiding barrel being pivotable about an axis of rotation disposed outside of the outer stem and substantially parallel to the first longitudinal axis; and

a rod releasably secured to the outer stem.

26. (previously presented) The surgical drill guide assembly of claim 25, wherein the drill guiding barrel has a depth stop for preventing a drill bit from exceeding a pre-determined depth.
27. (previously presented) The surgical drill guide assembly of claim 25, wherein the drill guiding barrel is attached to the outer stem by a hinge.
28. (previously presented) A surgical drill guide assembly comprising:
- an outer stem having an exterior surface and a first longitudinal axis;
 - a drill guiding barrel having a passageway, the passageway having a predetermined trajectory, the predetermined trajectory being at a substantially fixed angle with respect to the outer stem, the drill guiding barrel being pivotably attached to the outer stem at the exterior surface such that the fixed angle of the drill guiding barrel remains constant throughout pivoting of the drill guiding barrel about the outer stem, and wherein the drill guiding barrel is configured to receive and guide a surgical drill bit; and
 - a rod releasably secured to the outer stem.
29. (previously presented) The surgical drill guide assembly of claim 28, wherein the drill guiding barrel has a depth stop for preventing a drill bit from exceeding a pre-determined depth.
30. (previously presented) The surgical drill guide assembly of claim 28, wherein the drill guiding barrel is attached to the outer stem by a hinge.
31. (previously presented) The surgical drill guide assembly of claim 8, wherein the offset handle arm is mechanically attached to outer stem

32. (previously presented) The surgical drill guide assembly of claim 8, further comprising a button cam, the button cam being moveable between a first position and a second position, wherein the handle member is fixed with respect to the offset handle arm when the button cam is in the first position and the handle member is pivoted about the offset handle arm when the button cam is in the second position.

33. (previously presented) The surgical drill guide assembly of claim 32, wherein the button cam is biased towards the first position.

34. (previously presented) The surgical drill guide assembly of claim 10, wherein the non-circular cross-section of the rod is sized and configured to engage the non-circular cross passage of the release mechanism so that rotation of the release mechanism causes the rod to rotate with respect to the outer stem to attach and unattach the rod from the bone plate.

35. (previously presented) The surgical drill guide assembly of claim 12, wherein the release mechanism is axially moveable with respect to the outer stem, the release mechanism being moveable from a first position to a second position, wherein in the first position the outer stem is fixed with respect to the rod and wherein in the second position the outer stem is moveable with respect to the rod.

36. (previously presented) The surgical drill guide assembly of claim 35, wherein moving the release mechanism to the second position causes the ball detents to move out of the groove formed in the rod.

37. (previously presented) The surgical drill guide assembly of claim 36, wherein the release mechanism is biased toward the first position.
38. (previously presented) The surgical drill guide assembly of claim 13, further comprising a tab attached to outer stem, wherein the tab has a horizontal section and a vertical section.
39. (previously presented) The surgical drill guide assembly of claim 38, wherein the tab includes a pin for receiving the drill guide barrel so that the drill guide barrel is axially moveable with respect to the pin and pivotable about the pin.
40. (previously presented) The surgical drill guide assembly of claim 39, wherein the at least a portion of the drill guide barrel is sized and configured to be seated on the horizontal section of the tab and wherein the drill guide barrel is pivotable by axially moving the drill guide barrel with respect to the tab so that the drill guide barrel clears the vertical section of the tab.
41. (withdrawn) The surgical drill guide assembly of claim 16, wherein the multiple insertion passageways are aligned through a single exit location.